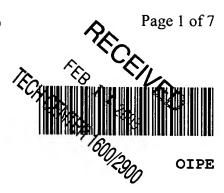
RE-RUN 5620



RAW SEQUENCE LISTING DATE: 02/05/2003 PATENT APPLICATION: US/10/031,158 TIME: 09:02:57

Input Set : A:\PTO.AMC.txt

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3 <110> APPLICANT: Pastan, Ira
         Essand, Magnus
                                                                  ENTERED
      5
             Lee, Byungkook
             Vasmatzis, George
      7
             Wolfgang, Curt
             Brinkmann, Ulrich
      8
      9
             The Government of the United States of America
     10
             as represented by the Secretary of the
     11
             Department of Health and Human Services .
     13 <120> TITLE OF INVENTION: T-Cell Receptor Gamma Alternate Reading Frame Protein,
            (TARP) and Uses Thereof
     16 <130> FILE REFERENCE: 015280-391200PC
C--> 18 <140> CURRENT APPLICATION NUMBER: US/10/031,158
C--> 19 <141> CURRENT FILING DATE: 2003-02-05
     21 <150> PRIOR APPLICATION NUMBER: US 60/157,471
     22 <151> PRIOR FILING DATE: 1999-10-01
     24 <150> PRIOR APPLICATION NUMBER: US 60/143,560
     25 <151> PRIOR FILING DATE: 1999-07-13
     27 <160> NUMBER OF SEQ ID NOS: 33
     29 <170> SOFTWARE: PatentIn Ver. 2.1
     31 <210> SEQ ID NO: 1
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     33 <212> TYPE: DNA
     34 <213> ORGANISM: Artificial Sequence
     36 <220> FEATURE:
     37 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
     39 <400> SEQUENCE: 1
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                                                                          27
     43 <210> SEQ ID NO: 2
     44 <211> LENGTH: 27
     45 <212> TYPE: DNA
     46 <213> ORGANISM: Artificial Sequence
     48 <220> FEATURE:
     49 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
    51 <400> SEQUENCE: 2
    52 agtactaaaa cgctgtcaaa aacagcc
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    56 <210> SEQ ID NO: 3
    57 <211> LENGTH: 24
    58 <212> TYPE: DNA
    59 <213> ORGANISM: Artificial Sequence
     61 <220> FEATURE:
    62 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
    64 <400> SEQUENCE: 3
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'RAW SEQUENCE LISTING DATE: 02/05/2003
PATENT APPLICATION: US/10/031,158 TIME: 09:02:57

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\02052003\J031158.raw

65 ttggacttgg attatcaaaa gtgg 24 68 <210> SEQ ID NO: 4 69 <211> LENGTH: 24 70 <212> TYPE: DNA 71 <213> ORGANISM: Artificial Sequence 73 <220> FEATURE: 74 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 76 <400> SEQUENCE: 4 77 ttgggcagtt ggaacaacct gaaa 80 <210> SEQ ID NO: 5 81 <211> LENGTH: 28 82 <212> TYPE: DNA 83 <213> ORGANISM: Artificial Sequence 85 <220> FEATURE: 86 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 88 <400> SEQUENCE: 5 89 gataaacaac ttgatgcaga tgtttccc 28 92 <210> SEQ ID NO: 6 93 <211> LENGTH: 28 94 <212> TYPE: DNA 95 <213> ORGANISM: Artificial Sequence 97 <220> FEATURE: 98 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 100 <400> SEQUENCE: 6 101 gggaaacatc tgcatcaagt tgtttatc 28 104 <210> SEQ ID NO: 7 105 <211> LENGTH: 27 106 <212> TYPE: DNA 107 <213> ORGANISM: Artificial Sequence 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 112 <400> SEQUENCE: 7 113 ctggagcttt gtttcagcaa ttgaagg 27 117 <210> SEQ ID NO: 8 118 <211> LENGTH: 27 119 <212> TYPE: DNA 120 <213> ORGANISM: Artificial Sequence 122 <220> FEATURE: 123 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 125 <400> SEQUENCE: 8 126 ctcaagaaga caaaggtatg ttccagc 27 129 <210> SEQ ID NO: 9 130 <211> LENGTH: 25 131 <212> TYPE: DNA 132 <213> ORGANISM: Artificial Sequence 134 <220> FEATURE: 135 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 137 <400> SEQUENCE: 9 138 ttatgatttc tctccattgc agcag 25

*RAW SEQUENCE LISTING DATE: 02/05/2003 PATENT APPLICATION: US/10/031,158 TIME: 09:02:57

Input Set : A:\PTO.AMC.txt

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144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
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                                                                       25
153 <210> SEQ. ID NO: 11
154 <211> LENGTH: 24
155 <212> TYPE: DNA
156 <213> ORGANISM: Artificial Sequence
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
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162 aagctttgtt ccgggaccaa atac
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166 <211> LENGTH: 24
167 <212> TYPE: DNA
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
173 <400> SEQUENCE: 12
174 tacctgtgac aacaagtgtt gttc
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178 <210> SEQ ID NO: 13
179 <211> LENGTH: 1027
180 <212> TYPE: DNA
181 <213> ORGANISM: Homo sapiens
183 <220> FEATURE:
184 <221> NAME/KEY: CDS
185 <222> LOCATION: (74)..(247)
186 <223> OTHER INFORMATION: Coding region for PS-TCR gamma 1 polypeptide
187
          (TARP)
189 <220> FEATURE:
190 <221> NAME/KEY: CDS
191 <222> LOCATION: (247)..(579)
192 <223> OTHER INFORMATION: Coding region for PS-TCR gamma 2 polypeptide (deduced amino
          acid sequence not displayed along with DNA sequence, due to
193
          overlapping CDS's)
197 <400> SEQUENCE: 13
198 gggcaagagt tgggcaaaaa aatcaaggta tttggtcccg gaacaaagct tatcattaca 60
200 gataaacaac ttg atg cag atg ttt ccc cca agc cca cta ttt ttc ttc
201
                   Met Gln Met Phe Pro Pro Ser Pro Leu Phe Phe
202
204 ctt caa ttg ctg aaa caa agc tcc aga agg ctg gaa cat acc ttt gtc
205 Leu Gln Leu Leu Lys Gln Ser Ser Arg Arg Leu Glu His Thr Phe Val
206
             15
208 ttc ttg aga aat ttt tcc ctg atg tta tta aga tac att ggg aag aaa
                                                                       205
209 Phe Leu Arg Asn Phe Ser Leu Met Leu Leu Arg Tyr Ile Gly Lys Lys
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*RAW SEQUENCE LISTING DATE: 02/05/2003
PATENT APPLICATION: US/10/031,158 TIME: 09:02:57

Input Set : A:\PTO.AMC.txt

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210
         30
                                                 40
212 aga aga gca aca cga ttc tgg gat ccc agg agg gga aca cca
                                                                      247
213 Arg Arg Ala Thr Arg Phe Trp Asp Pro Arg Arg Gly Thr Pro
                         50
216 tgaagactaa cgacacatac atgaaattta gctggttaac ggtgccagaa aagtcactgg 307
218 acaaagaaca cagatgtatc gtcagacatg agaataataa aaacggagtt gatcaagaaa 367
220 ttatctttcc tccaataaag acggatgtca tcacaatgga tcccaaagac aattgttcaa 427
222 aagatgcaaa tgatacacta ctgctgcagc tcacaaacac ctctgcatat tacatgtacc 487
224 tectectget ceteaagagt gtggtetatt ttgecateat cacetgetgt etgettagaa 547
226 gaacggcttt ctgctgcaat ggagagaaat cataacagac ggtggcacaa ggaggccatc 607
228 ttttcctcat cggttattgt ccctagaagc gtcttctgag gatctagttg ggctttcttt 667
230 ctgggtttgg gccatttcag ttctcatgtg tgtactattc tatcattatt gtataacggt 727
232 tttcaaacca gtgggcacac agagaacctc actctgtaat aacaatgagg aatagccacg 787
234 gegateteca geaceaatet etecatgttt tecacagete etecageeaa eecaaatage 847
236 geetgetata gtgtagaeat eetgeggett etageettgt eeetetetta gtgttettta 907
238 atcagataac tgcctggaag cctttcattt tacacgccct gaagcagtct tctttgctag 967
240 ttgaattatg tggtgtgttt ttccgtaata agcaaaataa atttaaaaaa atgaaaagtt 1027
243 <210> SEO ID NO: 14
244 <211> LENGTH: 58
245 <212> TYPE: PRT
246 <213> ORGANISM: Homo sapiens
248 <400> SEQUENCE: 14
249 Met Gln Met Phe Pro Pro Ser Pro Leu Phe Phe Leu Gln Leu Leu
250
     1
252 Lys Gln Ser Ser Arg Arg Leu Glu His Thr Phe Val Phe Leu Arg Asn
                 20
                                     25
255 Phe Ser Leu Met Leu Leu Arg Tyr Ile Gly Lys Lys Arg Arg Ala Thr
             35
258 Arg Phe Trp Asp Pro Arg Arg Gly Thr Pro
        50
262 <210> SEQ ID NO: 15
263 <211> LENGTH: 111
264 <212> TYPE: PRT
265 <213> ORGANISM: Homo sapiens
267 <400> SEQUENCE: 15
268 Met Lys Thr Asn Asp Thr Tyr Met Lys Phe Ser Trp Leu Thr Val Pro
271 Glu Lys Ser Leu Asp Lys Glu His Arg Cys Ile Val Arg His Glu Asn
274 Asn Lys Asn Gly Val Asp Gln Glu Ile Ile Phe Pro Pro Ile Lys Thr
275
            35
277 Asp Val Ile Thr Met Asp Pro Lys Asp Asn Cys Ser Lys Asp Ala Asn
                             55
280 Asp Thr Leu Leu Gln Leu Thr Asn Thr Ser Ala Tyr Tyr Met Tyr
283 Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala Ile Ile Thr Cys
286 Cys Leu Leu Arg Arg Thr Ala Phe Cys Cys Asn Gly Glu Lys Ser
287
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                                    105
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*RAW SEQUENCE LISTING DATE: 02/05/2003 PATENT APPLICATION: US/10/031,158 TIME: 09:02:57

Input Set : A:\PTO.AMC.txt

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291 <210> SEQ ID NO: 16
292 <211> LENGTH: 16
293 <212> TYPE: PRT
294 <213> ORGANISM: Homo sapiens
296 <220> FEATURE:
297 <223> OTHER INFORMATION: Partial amino acid sequence of TARP (residues
        42-57)
300 <400> SEQUENCE: 16
301 Gly Lys Lys Arg Arg Ala Thr Arg Phe Trp Asp Pro Arg Arg Gly Thr
302 1
                   5
                                         10
305 <210> SEQ ID NO: 17
306 <211> LENGTH: 16
307 <212> TYPE: PRT
308 <213> ORGANISM: Dictyostelium discoideum
310 <220> FEATURE:
311 <223> OTHER INFORMATION: Partial amino acid sequence of Tup1 (dTup,
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314 <400> SEQUENCE: 17
315 Gly Ser Lys Asp Arg Ser Val Gln Phe Trp Asp Pro Arg Asn Gly Thr
319 <210> SEQ ID NO: 18
320 <211> LENGTH: 16
321 <212> TYPE: PRT
322 <213> ORGANISM: Saccharomyces cerevisiae
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Partial amino acid sequence of Tup1 (yTup1,
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328 <400> SEQUENCE: 18
329 Gly Ser Lys Asp Arg Gly Val Leu Phe Trp Asp Lys Lys Ser Gly Asn
333 <210> SEQ ID NO: 19
334 <211> LENGTH: 41
335 <212> TYPE: DNA
336 <213> ORGANISM: Artificial Sequence
338 <220> FEATURE:
339 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
341 <400> SEOUENCE: 19
342 ttacagataa acaacttgat acagatgttt cccccaagcc c
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346 <210> SEQ ID NO: 20
347 <211> LENGTH: 39
348 <212> TYPE: DNA
349 <213> ORGANISM: Artificial Sequence
351 <220> FEATURE:
352 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
354 <400> SEQUENCE: 20
355 gggcttgggg gaaacatctg tatcaagttg tttatctgt
                                                                      39
358 <210> SEQ ID NO: 21
359 <211> LENGTH: 36
360 <212> TYPE: DNA
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